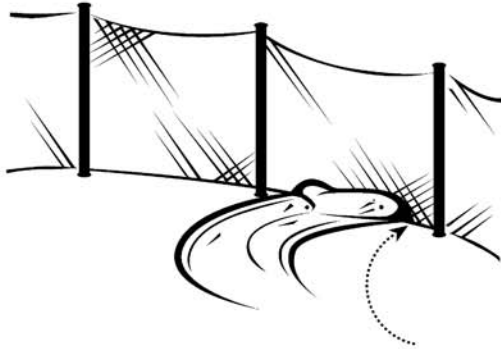


Water Transportation and Ship Building and Repairing Facilities

BEST MANAGEMENT PRACTICES



Use tarps to contain debris during maintenance activities.

Use lonas para contener desperdicios durante las actividades de mantenimiento.



Recycle fluids and properly dispose of waste.

Recicle líquidos y deshágase de desperdicios apropiadamente.



Maintain a clean facility by sweeping.

Barra con frecuencia para mantener el taller limpio.

How to Prevent Stormwater Pollution at a Water Transportation Facility



Immediately clean up spills using dry methods and containment.

Limpe cualquier reguero inmediatamente utilizando los métodos secos y de contención.



Do not allow runoff from cleaning and painting activities.

No permita que nada relacionado con las actividades de limpieza y pintura corra a los desagües.

BMPs

How to Prevent Stormwater Pollution at a Water Transportation Facility

BEST MANAGEMENT PRACTICES

■ Pressure Washing

Perform pressure washing only in designated, contained areas with plain water containing no detergents or additives. Use diagonal trenches, berms and/or sumps at marine railways. Use solid decking, gutters, and sumps at lift platforms and decks to contain and collect washwater for treatment, solids removal and possible reuse.

■ Sanding, Painting and Paint Removal

Enclose, cover, and contain painting, blasting and sanding activities. Cover drains, trenches, and drainage channels. Collect spent abrasives and store under cover to await proper disposal. Mix paints and solvent in designated areas away from drains, ditches, piers, and surface waters, preferably indoors or under cover. Keep paint and paint thinner away from traffic areas. Allow empty paint cans to dry before disposal. Recycle paint, paint thinner, and solvents.

■ Facility Operations

Prohibit uncontained spray painting, blasting or sanding activities over open water. Prohibit spray painting, blasting or sanding activities during windy conditions which prevent containment.

If spills occur, stop source of spill immediately and contain the liquid. If near the water, use oil containment booms. Don't use emulsifier or dispersant. Cover spill with absorbent material. Keep enclosed areas well ventilated. Properly dispose of cleanup materials.

Clean and maintain facility regularly. Sweep up debris, rather than hose, and properly dispose of waste. Do not pour liquid waste down floor drains, sinks, outdoor storm drain inlets or into receiving waters. Keep an inventory of materials used at facility. Regularly inspect facility for proper implementation of control measures and containers and piping systems to maintain container integrity and detect potential leaks and failures. Repair problems immediately.

■ Material Handling and Storage

Store permanent tanks and containerized materials (fuels, paints, solvents, etc.) in paved, covered, contained, secure areas away from drains. Provide containment for the larger of either 10 percent of the volume of all containers or 110 percent of the volume of the largest tank. Store reactive, ignitable, or flammable liquids in compliance with local fire code. Use portable drip pans where needed and spill troughs for drums with taps.

Identify potentially hazardous materials, their use, and characteristics. Secure and monitor materials to prevent theft and misuse. Control purchasing to reduce storage and handling of hazardous materials. Record quantity, receipt date, service life, users, and disposal routes.

■ Drydock Maintenance and Drydocking

Hang plastic barriers from flying bridge of the drydock, from bow or stern of the vessel, or from temporary structures and place beneath hull and between hull and drydock walls for containment. Weight bottom edge of containment tarps during a light breeze. Cover open areas between decks when sandblasting (railings, scuppers, freeing ports, ladders, doorways, etc.).

Sweep accessible areas of drydock to remove debris before flooding. Clean rest of dock after vessel is removed and dock raised. Collect any washwater used and treat to remove solids and potential metals.

■ Nondrydock Containment

Hang tarps from the boat, fixed, or floating platforms and place under boats to reduce wind-blown pollutants and collect waste. When work is done in water, prevent blast material or paint overspray from contacting stormwater or receiving water.

Pave or tarp surfaces under marine railways and clean before incoming tide. Haul vessels beyond high tide zone before work starts or stop work during high tide.

■ Engine Maintenance and Repairs

Dispose of greasy rags, oil filters, air filters, batteries, spent coolant, and degreasers properly. Drain oil filters and other parts before disposal or recycling. Label and track recycling of waste material. Maintain a centralized waste storage area. Store cracked batteries in a nonleaking secondary container.

Promptly transfer fluids to proper container; do not leave full drip pans or other open containers around the shop. Empty and clean drip pans and containers.

■ Shipboard Water Handling and Disposal

Keep process and cooling water used aboard ships separate from sanitary wastes and free from spent abrasives and paint. Discharge sanitary wastes from the ship being repaired to the yard's sanitary system or a commercial waste disposal company. Use spill prevention and containment activities during transfer. Collect and dispose of bilge and ballast waters to a licensed waste disposal company. Inspect connecting hoses for leaks.

■ Numbers to Call for More Information

